



ChatGPT's Role in Transforming Employee Recruitment and Selection Processes

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Abstract

Employee recruitment and selection is a key process in human resource management that plays an important role in the success of an organisation. This process involves the search, evaluation and selection of individuals who have the qualifications and potential that match the needs of the organisation. One of the significant changes that has transformed the employee recruitment and selection paradigm is the advent of advanced technologies such as ChatGPT. This research aims to analyse the role of ChatGPT in the transformation of the employee recruitment and selection process. The method used is a qualitative literature review that focuses on an in-depth understanding of the topic in the time span from 2018 to 2023. The main objective of this method is to identify, analyse, and synthesise relevant scientific literature that has been published in various journals, conference papers, and other academic sources accessible through Google Scholar. The study results show that the use of ChatGPT in the transformation of employee recruitment and selection processes is a significant step towards higher efficiency and effectiveness in human resource management. However, we must remain cautious in the face of emerging impacts and challenges. In order to maximise the potential of ChatGPT in recruitment and selection, and ensure an ethical and fair approach.

Keyword: ChatGPT, Employee Selection, Recruitment, Transforming

1. INTRODUCTION

Recruitment and employee selection are inseparable stages in human resource management strategy that play a crucial role in determining the success of an organization [1]. In this process, organizations carefully plan the steps for identifying the most suitable individuals, conduct in-depth evaluations of their qualifications and potential, and ultimately choose those who align best with the company's needs and vision. However, in today's modern era marked by rapid advancements in information technology, the dynamics of recruitment and employee selection have undergone significant transformation. Technology has enabled the use of intelligent algorithms to filter and assess applicants more accurately, while online platforms and social networks provide broader access to talent search [2]. Thus, this process not only remains pivotal in building exceptional teams but also requires ongoing adaptation to address challenges arising in the ever-evolving business environment.

One significant change that has shifted the paradigm of employee recruitment and selection is the emergence of advanced technology like ChatGPT. ChatGPT is an artificial intelligence-based model capable of generating text in human language with remarkable realism [3], [4]. Its primary advantage lies in its ability to facilitate human-machine interactions naturally through text-based conversations that resemble conversations with a human counterpart. By understanding and responding effectively to user questions and instructions, ChatGPT has become a highly appealing tool in various contexts, including the world of employee recruitment and selection.

The use of ChatGPT in the recruitment and employee selection process opens the door to greater innovation [5]. With this technology, companies can integrate artificial intelligence aspects into the early stages of selection, enabling them to quickly and efficiently process and evaluate thousands of applicant applications. Additionally, ChatGPT can be used in initial interviews with applicants, helping gather more detailed information about their qualifications and experiences [6]. This not only enhances selection process efficiency but also generates richer data for making better decisions in selecting employees that align with organizational needs. Thus, the presence of technology like ChatGPT has transformed the landscape of employee recruitment and selection, creating new opportunities to enhance accuracy and effectiveness.

The use of ChatGPT in the employee recruitment and selection process provides vast opportunities to optimize various aspects of human resource management. Firstly, ChatGPT can effectively screen and manage a large volume of applications and CVs that flow into the company [7]. With its advanced text analysis capabilities, ChatGPT can quickly identify keywords and relevant qualifications based on company criteria, reducing the administrative workload that typically consumes a lot of time. This enables HR teams to allocate their resources more wisely and focus on applicants with higher potential.

Furthermore, ChatGPT also has the potential to be a valuable tool in conducting initial interviews with candidates. As a customizable chatbot, ChatGPT can conduct consistent structured interviews with all applicants, gathering detailed information about their skills, experiences, and motivations [8]. The main advantage of this approach is that ChatGPT is not influenced by emotional factors or personal bias, providing objective assessments. Thus, the use of ChatGPT in the employee recruitment and selection process not only enhances efficiency but also helps organizations gain deeper insights into candidate potential and quality.

Of course, the use of ChatGPT in the context of employee recruitment and selection brings forth a number of potential challenges and ethical questions that must be seriously considered. One major challenge is how to maintain fairness and avoid bias in the selection process when ChatGPT is used to evaluate candidates. Technologies like ChatGPT tend to base their assessments on existing data, and if the training data used has certain biases, it can lead to unfair selection decisions [9]. Therefore, careful efforts are needed to identify and address potential biases in ChatGPT algorithms and ensure that each candidate is evaluated based on their true qualifications and abilities.

Additionally, consideration must be given to how to manage the privacy of candidate data contained in conversations with ChatGPT. Because this technology involves detailed information exchange between applicants and the machine, companies must have strict policies for managing and protecting candidates' personal data. Data protection and privacy become even more critical with regulations like GDPR in Europe and various data privacy laws in different countries [10]. Therefore, companies must ensure compliance with these regulations and carefully safeguard the integrity of candidates' personal data. Thus, while embracing the potential of ChatGPT technology in recruitment, organizations also need to focus on ethical and privacy aspects to ensure that the selection process remains fair and secure for all parties involved.

To address the challenges and potential associated with the use of ChatGPT in employee recruitment and selection, this research will investigate ChatGPT's role in transforming these processes. This research will involve in-depth analysis of ChatGPT's use in various organizations and its impact on the efficiency, effectiveness, and fairness of the recruitment and selection processes.

The use of ChatGPT in employee recruitment and selection opens up new opportunities, but more research is needed. We need to measure the long-term accuracy of ChatGPT in employee selection and compare it with traditional methods. In addition, it is important to understand the humanitarian and ethical aspects of its use. Studies also need to investigate the impact of ChatGPT on team dynamics in HR and management departments. The research objectives are to measure the long-term effectiveness of using ChatGPT in employee selection, develop ethical guidelines, and understand its impact on team dynamics. This research is expected to make important contributions in improving the efficiency of employee selection with ChatGPT, ensuring fair and sustainable use, and understanding how ChatGPT affects team collaboration. Through this research, we can better optimise the use of ChatGPT in recruitment and selection.

2. MATERIALS AND METHOD

In this study, we employ a qualitative literature review method to gain a profound comprehension of the role of ChatGPT in reshaping the employee recruitment and selection process from 2018 to 2023. The primary aim of this approach is to recognize, scrutinize, and integrate pertinent academic literature published across various journals, conference papers, and other scholarly sources accessible via Google Scholar. The research involves several key stages. Initially, the researcher identifies a specific and pertinent research subject, alongside a clear grasp of the background and research objectives. Subsequently, well-defined and precise search criteria are established to steer the literature exploration via Google Scholar, covering the period from 2018 to 2023. Once the search results are retrieved, the researcher performs a literature selection process by evaluating the abstracts and summaries of each discovered article or source. Literature that lacks relevance or fails to meet the research criteria is excluded from the analysis. The chosen literature is then subjected to a comprehensive examination, with an emphasis on recognizing critical discoveries, ideas, theories, and trends embedded within the literature. A qualitative approach is adopted to attain a profound comprehension of the research subject. The outcomes of the literature scrutiny are subsequently amalgamated and expounded upon by the researcher to create an all-encompassing grasp of the research subject. Furthermore, these findings are organized into an exhaustive research report with a structured and coherent format. The report encompasses the primary discoveries, analysis, and in-depth interpretations. The research is concluded by formulating summarizing conclusions that encapsulate the core findings and implications of the literature review concerning the research subject. This method empowers researchers to acquire a comprehensive and profound understanding of the research subject without the necessity for primary data collection. By relying on existing

literature, this research has the potential to make a significant contribution to the advancement of theories, problem-solving, or decision-making in various scientific domains, particularly within the context of ChatGPT's impact on the transformation of the employee recruitment and selection process.

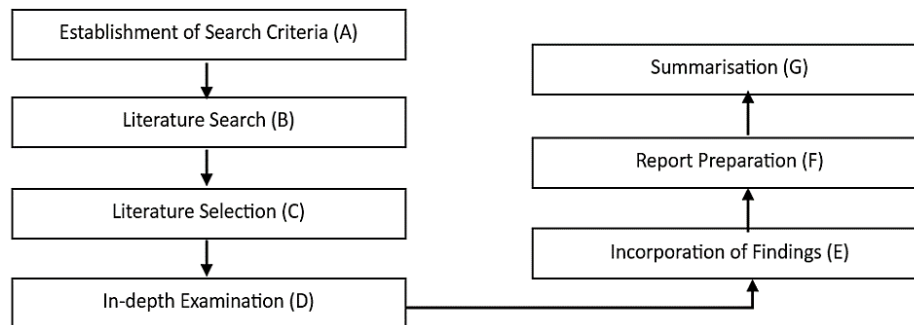


Figure 1. Flowchart Methodology

3. RESULTS AND DISCUSSION

This research will be presented in narrative form as an alternative to statistical data presentation. The narrative approach allows for a more in-depth explanation of the research, including an understanding of the historical background, research process, qualitative aspects, overall context, and an in-depth description of the findings. This approach also has the potential to be more interesting and relevant to readers who may not have a strong statistical background. Here, we start analysing the discussion of this research.

The use of artificial intelligence (AI) technology in various aspects of business and human resource management has brought about a very significant change in the employee recruitment and selection process. A recent innovation that has changed this paradigm is ChatGPT, an AI-based model that illustrates the rapid advances in natural language processing. Along with these technological developments, employee recruitment and selection has undergone a deep fundamental transformation, changing the way organisations understand, assess and integrate new workforces. In this analysis, we will outline in more detail the role that ChatGPT plays in this transformation, identify its wide-ranging impacts, and reflect on its deeper implications in a business and ethical context, covering how this technology may affect the relationship between companies and employees, as well as issues of privacy and fairness in an increasingly deepened recruitment process.

One of the key benefits offered by ChatGPT is its ability to perform automated prescreening, bringing about substantial changes in the efficiency and productivity of the recruitment process. By utilising ChatGPT-based chatbots, organisations have the opportunity to automate the initial stages of screening CVs and applications of potential employees [11]. In this act, ChatGPT acts as a highly sophisticated virtual assistant, able to evaluate and compare various applications quickly and accurately. This in turn reduces the administrative burden on Human Resources (HR) teams, freeing up valuable time and resources to focus on a more in-depth and quality-orientated candidate evaluation stage. By optimising the recruitment process through ChatGPT integration, organisations can identify top talent more quickly and effectively, ultimately increasing the likelihood of hiring employees that fit the needs and culture of the company. Furthermore, the use of this technology can also have a positive impact on the candidate experience, by offering faster responses and a more interactive experience in the initial recruitment process.

In addition to facilitating pre-selection, ChatGPT also opens up opportunities to run initial interviews with prospective employees. In this context, a customised chatbot based on ChatGPT can be empowered to ask candidates a series of targeted questions, which helps in gathering invaluable additional information regarding their experience, skills as well as motivations [12]. AI leadership in this early stage adds a layer of deeper and contextual understanding related to the qualifications and personality of prospective employees, which in turn creates an added advantage in the selection process [13]. By better understanding candidates, organisations have a stronger foundation to make strategic decisions in the recruitment process, which minimises risk and maximises the fit between potential employees and company needs. What's more, this approach also creates a more interactive and informative experience for candidates, giving them the opportunity to communicate more effectively about the company's values, expectations and vision. This illustrates the use of AI technology that helps in providing a positive and informative experience to potential employees, which in turn can enhance the company's reputation as an attractive and modern workplace. In this way, the use of ChatGPT in initial interviews not only optimises the selection process, but also enriches the relationship between the company and the candidate, creating a positive impression in the perspective of talent potentially joining the organization.

While ChatGPT brings significant benefits in the employee selection process, it needs to be recognised that its use can also open the door to issues of fairness and bias. Artificial intelligence models like ChatGPT

can have hidden biases in their decision-making, which depend heavily on the training data they use [14]. Even unintentionally, these systems can reflect and reinforce the social biases present in the training data [15]. Therefore, it is imperative to implement clear and structured policies to ensure that these models are used in an ethical manner, not resulting in discrimination against candidates based on factors such as gender, race or social background. Ethical considerations should also include regular monitoring and assessment of ChatGPT's performance in the context of employee selection. This requires ongoing efforts to identify and address biases that may arise in the algorithm. In addition, it is important for organisations to develop robust understanding and transparency strategies to deal with these issues of fairness and bias. By doing so, organisations can maximise the potential of technologies such as ChatGPT in the recruitment process, while still ensuring that the decisions made remain fair, objective and grounded in appropriate qualifications. In an era where technology is increasingly involved in the decision-making process, addressing these ethical issues is integral to building sustainable and responsible employee selection practices.

The use of ChatGPT in the context of interviewing and interacting with candidates brings additional responsibilities related to data privacy [16]. This raises important questions about how organisations manage, store and protect data obtained from conversations with candidates. Prudence and a strong commitment to data security are crucial in avoiding potential privacy breaches [17], [18]. Organisations need to ensure that they have robust IT infrastructure and strict data security policies in place to keep candidates' personal information confidential. In addition, transparency is key in maintaining candidate trust. Candidates should be provided with adequate information on how their data will be used, stored, and deleted upon completion of the recruitment process. This is an important step to ensure that candidates feel safe and comfortable when interacting with ChatGPT-based systems. In the face of data privacy challenges, organisations must also ensure that they operate in compliance with applicable data privacy laws and regulations, such as GDPR in Europe or data privacy regulations in other countries. By doing this, organisations can build positive and sustainable relationships with candidates while meeting high privacy standards.

ChatGPT's role in the transformation of employee recruitment and selection processes also includes the development and evolution of the technology itself. Artificial intelligence models like ChatGPT are the product of continuous research and development, and its future promises to bring ever more sophisticated innovations [19]. Over time, ChatGPT can be continuously improved through more sophisticated training, richer data, and wider use in various business contexts [20]. This will lead to an improvement in ChatGPT's ability to understand human language more deeply and provide more relevant and contextualised responses. The growth and development of ChatGPT will also be influenced by new discoveries in the fields of artificial intelligence and natural language processing. By continuing to apply the latest research, the technology can integrate a deeper understanding of social context, culture and domain-specific content, becoming more efficient in facilitating more accurate and targeted recruitment. Regular updates and optimisation in the use of ChatGPT in various stages of the recruitment process will help organisations to stay at the forefront of attracting and selecting the best talent. Therefore, ChatGPT is not only an effective tool in the current employee selection process, but also a potential source for continuous innovation in human resource management in the future.

It is important to internalise that, while ChatGPT has proven its ability to optimise various aspects of the recruitment and selection process, the role of people remains a key factor in the final decision. Granting employment to an employee is a decision that has long-term implications and a significant impact on the organisation [21]. Therefore, making this decision should remain the responsibility of the Human Resources (HR) team and experienced managers, who have greater insight and judgement with regard to qualifications, skills and company culture. In this context, ChatGPT should be used as an efficient support tool. AI-based models such as ChatGPT can help in screening potential employees, provide additional relevant data, and even offer valuable insights about candidates. However, the final decision-making should be the result of combining human discretion and the data analysis provided by ChatGPT. This will allow organisations to leverage the latest technology while still ensuring that their decisions are based on ethical and high-quality human judgement. Thus, the collaboration between technology and humans will form a strong foundation for achieving better recruitment and more informed employee selection [22].

The use of advanced technologies such as ChatGPT not only brings impact on operational aspects and efficiency, but also affects organisational culture substantially [23]. Organisations that decide to adopt this technology must understand that the changes that occur in the recruitment process and human resource management can also create changes in the dynamics of corporate culture. In this context, a proactive approach is needed in designing appropriate policies and training to ensure that the integration of ChatGPT into the corporate culture goes well. An important first step is to clearly communicate the vision and purpose of using ChatGPT to all members of the organisation [24]. This helps in creating a better understanding of how this technology will affect day-to-day operations and leads to wider acceptance. Next, organisations need to design specific training for employees to enable them to use ChatGPT effectively. This includes understanding how the technology works, its capabilities and limitations, and how to integrate it in their work processes. What's more, there needs to be clear policies governing the use of ChatGPT, including data privacy issues and ethical

use. By doing so, organisations can better manage cultural change, maintain continuity in corporate values, and optimise the potential of this technology in achieving their business goals.

Overall, the role of ChatGPT in the transformation of employee recruitment and selection processes is an interesting and complex phenomenon. It brings benefits in terms of efficiency and quality in the selection process, but also poses challenges in terms of ethics and fairness. In its use, it is necessary to carefully consider how to combine this technology with existing HR practices to achieve the best results that benefit both the organisation and the candidates concerned. As technology evolves and ethics are better understood, ChatGPT's role in employee recruitment and selection will continue to evolve and change.

4. CONCLUSION

Implementing ChatGPT in the evolving employee recruitment and selection process marks a significant stride in advancing human resource management towards enhanced efficiency and effectiveness. However, it is imperative to remain cognizant of the potential impacts and challenges that may emerge in this transformative journey. To maximize ChatGPT's potential in recruitment and selection while upholding ethical and equitable practices, several critical steps and recommendations can be considered:

1. **Further Development:** Organizations should commit to ongoing refinement and development of ChatGPT and similar technologies to augment language proficiency and contextual comprehension.
2. **Continuous Monitoring and Evaluation:** A system of continuous monitoring and evaluation is crucial for identifying and rectifying any biases that may surface in ChatGPT's decision-making processes.
3. **Staff Training:** Human resource professionals responsible for recruitment and selection must receive comprehensive training in the proficient use of ChatGPT and other AI technologies.
4. **Policies and Ethics:** Clear and robust policies governing the use of ChatGPT should be established. This includes addressing candidate data privacy and mitigating bias. Ethical considerations should be at the forefront of decision-making.
5. **Human Involvement:** While these technologies offer substantial capabilities, humans should retain their role as the ultimate decision-makers in the recruitment and selection process. ChatGPT should serve as a valuable tool but not supplant human judgment.
6. **Transparency to Candidates:** Maintain transparency with candidates regarding the incorporation of ChatGPT in the selection process. Inform candidates of their rights regarding personal data and ensure open communication.
7. **Continued Research:** Promote ongoing research and development efforts in the application of ChatGPT in recruitment and selection. This research should delve into long-term impacts and avenues for improvement.

Looking forward, it is essential to envision the future landscape, potential for further research, and broader implications of ChatGPT integration in HR practices. This includes exploring alternative architectural models, incorporating additional datasets, and investigating real-time implementation. Such endeavors will not only fortify the influence of this technology but also offer valuable guidance for researchers seeking to advance the realm of ChatGPT. With these considerations in mind, organizations can seamlessly integrate ChatGPT into their employee recruitment and selection processes, harness its full potential, and maintain adherence to the principles of ethics and fairness. In an ever-evolving world, adapting to new technologies is pivotal for enduring success in human resource management.

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